



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,916	03/23/2000	David J. Marsh	MS1-525US	9507

22801 7590 04/06/2004

LEE & HAYES PLLC  
421 W RIVERSIDE AVENUE SUITE 500  
SPOKANE, WA 99201

EXAMINER
----------

LEE, SEUNG H

ART UNIT	PAPER NUMBER
----------	--------------

2876

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/534,916

Applicant(s)

MARSH, DAVID J.

Examiner

Seung H Lee

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22, 24-36, 38-46, 50 and 52-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22, 24-36, 38-46, 50 and 52-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Receipt is acknowledged of the response filed on 18 December 2004, which has been entered in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-12, 16, 18, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owashi et al. (US 6,363,210, of the record)(hereinafter referred to as 'Owashi') in view of Kim et al. (US 5,799,081)(hereinafter referred to as 'Kim').

Owashi teaches to checking whether an IC card (180) is authorized to encrypt (165) and decrypt (168) the media content received at a user's home from a programming source with one particular household such as receiver decoder (52) wherein the IC card stores a valuable data such as a user ID serves as a decryption key to confirm the signal reception permission and arithmetic algorithm serves as an additional data in which can be changeable, the user ID does not encrypt and decrypt the media content associated with other households such as VTR (53), a communication module or management circuit (164) to communicate to encryption circuit (165) and decryption circuit (68) to confirm the result of collating user identifying code with the user ID stored in the IC card, and decrypting the media content only if the

Art Unit: 2876

smart card is authorized to decrypt the media content only if data (i.e., arithmetic algorithm) other than electronic money is stored on the smart card (see Figs. 6-7; col. 9, line 53- col. 12, line 44).

However, Owashi fails to teach encrypting of media content.

Kim teaches an integrated receiver/decoder (IRD) (20) comprising a card reader interface (23) to read data/information from an access card (22) or a smart card wherein the access card's permission based on the user, subscriber, selected channel is required for encrypting/encoding the digital MPEG video content to format/convert into NTSC signal having a horizontal and vertical sync signals and a Macrovision-mode copy protection signals wherein the access card is designed to use with a particular household that is for receiving the DirectTV's satellite broadcasting signal (see Fig. 4; col. 2, line 20- col. 3, line 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kim to the teachings of Owashi in order to prevent illegal copying/viewing of the digital media content, that is, by integrating/encrypting the special signals such as the Macrovision-mode copy protection into the media signal in which is inhibiting copying to the analog VCR, and therefore an obvious expedient.

4. Claims 1, 2, 5-8, 13, 14, 26 -32, 34-36, 38-45, 50, 52, 53, and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owashi as modified by Kim, and

further in view of Handelman et al. (US 5,666,412, of the record)(hereinafter referred to as 'Handelman') and Adams (US 6,378,130, of the record).

The teachings of Owashi/Kim have been discussed above.

Although, Owashi/Kim teaches the IC card containing the user ID to encrypt/decrypt the media content, they fails to teach or fairly suggest that the IC card comprises a nonvolatile memory and a user-specific information storage section.

However, Handelman teaches a memory unit comprises a nonvolatile memory or Read Only Memory (ROM) (see col. 12, line 22 - 31), the smart card is used to limit where rendering of the media content can occur (12, 112, and 212) (see col. 7, line 14 - 23), a plurality of IC card (28 and 30) for a different category of media content, the smart card corresponds to a particular category of media content that comprise a family oriented media which program does not require the parental control and adult oriented media which program requires the parental control (see col. 3, line 13 - 18), comparing a rating corresponding to the media content (parental control) to a rating associated with a smart card and allowing access to the media content if the rating corresponding to the media content does not exceed the rating associated with the smart card (see col. 7, line 24 - 43), the rating associated with the smart card is stored on the smart card (see col. 3, line 18 - 23), the allowing access comprising allowing the media content to be decrypted (Describable Program Channel) for rendering (see Fig. 2), requiring the smart card to be inserted into a smart card reader coupled to a computing device (50) that is decrypting the media content (see Fig. 7), the smart card having a processor to execute instruction to encrypt/decrypt the media content and to manage the user-specific

Art Unit: 2876

information storage section (see col. 8, line 9 - 38), maintaining user information on the smart card (28 and 30), the information being available only when the smart card is coupled to the computing device (10) (see Fig. 1), the network devices include to receive media content (10) and device to render media content (12) (see Fig. 1), one of plurality of smart card is coupled to a device (10) when the smart card is inserted into a smart card reader coupled to the device (10) (see Fig. 1). And Adams teaches the memory (32) of the set-top terminal (6) includes a parental control codes, favorite channel lineups, authorization table (see Fig. 3; col. 4, lines 43-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate teachings of Handelman and Adams to the teachings of Owashi/Kim in order to provide an improved and an enhanced means by encrypting and decrypting the media content based on the key value of the smart card (i.e., adult and/or family oriented media content). Moreover, such modification would provide a control of the decrypting of the media content means wherein the smart card can be programmed to properly decrypt the media content for specified time period (i.e., from 4:00 PM to 8:00 PM for children). Furthermore, such modification (e.g., storing the personnel favorite channels, parental codes, authorization table onto the smart card) would provide a convenient operating means by accessing the favorite channels stored in the memory through a multiple set-top boxes where the smart card can be acknowledged by terminal, and therefore an obvious expedient.

5. Claims 20, 25, 33, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owashi as modified by Kim and Handelman, and further in view of Thompson et al (US 5,805,204, of the record)(hereinafter referred to as 'Thompson').

The teachings of Owashi/Kim/Handelman have been discussed above.

Although, Owashi/Kim/Handelman teaches the communication system to encrypt and decrypt the media, they fails to teach or fairly suggest that one or more memories containing a computer program that is executable by a processor.

However, Thompson teaches the communication module or decoder unit (50) comprises one or more computer-readable memories (69 and 73) containing a computer program that is executable by a processor (71) (see Fig. 7; col. 6, line 21 - col. 7, line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the notoriously old and well known a processor to execute the computer program stored in a computer memories as taught by Thompson to the teachings of Owashi/Kim/Handelman in order to provide program and execute the program to encrypt and decrypt the media content according to the collating result, and therefore an obvious expedient.

6. Claims 3, 4, 15, 17, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owashi as modified by Kim and Handelman, and further in view of Teicher (US 5,744,787, of the record).

The teachings of Owashi/Kim/Handelman have been discussed above.

Although, Owashi/Kim/Handelman teaches the smart card to encrypt and decrypt the media content, he fails to teach or fairly suggest the smart card include electronic money.

Teicher teaches the smart card includes the electronic wallet (310) to make transaction only if the electronic wallet has enough money in the smart card (455) (see Fig. 3 and Fig. 5)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the electronic wallet as taught by Teicher to the teachings of Owashi/Kim/Handelman due to the fact that the processing time for one to order programs from the remote pay-per-view provider by the subscriber would be substantially reduced by eliminating the process/step of authorization/verification and debiting the value on the smart card at the moment the subscriber initiates the transaction/order. Moreover, such modification (i.e., the electronic wallet within the smart card) would provide a universal smart card to use at the multiple location/terminal (i.e., Point Of Sales Terminal (POS), ATM, gas station) to purchase the products or services, and therefore an obvious expedient.

7. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owashi as modified by Kim, Handelman and Adams, and further in view of Rouyrre et al. (US 5,841,119, of the record)(hereinafter referred to as 'Rouyrre').

The teachings of Owashi/Kim/Handelman/Adams have been discussed above.



Although, Owashi/Kim/Handelman/Adams teaches the method of identifying boundaries of a network, they fail to teach the smart card can be moved to different device to alter the boundaries of the network.

However, Rouyrre teaches a smart card can be used for payment card for telephone and accessing the TV pay channel (see col. 1, lines 18-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Rouyrre to the teachings of Owashi/Kim/Handelman/Adams in order to provide convenient means by accessing the various network using a single smart card, that is, user need only one smart card to access the telephone network and cable television network. Moreover, such modification would simplify the maintenance since users only carry one smart card, they only need to recognize one password and PIN number to access the multiple network, and therefore an obvious expedient.

### ***Response to Arguments***

8. Applicant's arguments filed 18 December 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that "...*the section contains no response to any of the arguments presented by Applicant...*" (see page 15, line 2+), the office action mailed on 19 August 2003 was not repeated of the rejection of 11 April 2003 since the office action mailed on 19 August 2003 was moot in view of new ground(s) of the rejection by withdrawing the finality of office action mailed on 11 April 2003. Therefore,

responses to the arguments filed on 11 July 2003 were not necessary. However, the response received on 18 December 2003 does not contain any arguments particularly regarding claims 1-22, 24-36, 38-46, 50 and 52-57 in which are rejected under 35 U.S.C. § 103(a), the Examiner responses to arguments filed on 11 July 2003.

In response to applicant's argument that *"...Kim does not disclose or suggest a key that is associated with one particular household.....but not to encrypt media content associated with other households...."* (see page 16, line 9+ of response filed on 11 July 2003), the Examiner respectfully disagrees with the applicant wherein Owashi teaches an IC card associated with one particular household namely a receiver decoder and not associated with other household namely VTR. Moreover, Kim also teaches an access card that is associated with particular household namely an integrated receiver/decoder (IRD) system for receiving satellite broadcasting media as discussed in paragraph 3 above.

In response to applicant's argument that *"....Kim does not disclose or suggest key-based encryption....."* (see page 16, line 21+ of response filed on 11 July 2003), Kim simply provide an evidence of encrypting media content using content of the access card, that is, selected channels are viewable according to contents of the access card (see col. 3, lines 5-10 of Kim) and adding a Macrovision-mode copy protection signals into the media signal for prohibiting copy of the media. Therefore, given its broadest reasonable interpretation of this instant claimed invention, the combination of Owashi and Kim meets the claimed invention as discussed in paragraph 3 above.

In response to applicant's argument that "...*such unit and microcomputer does not disclose or suggest a decryption key and additional data...*" (see page 19, line 21+ of response filed on 11 July 2003), the Examiner respectfully disagrees with the applicant wherein the access card of Kim is used for determining user(s) can view received media content according to the privileges of the access card, that is, the access card contain a permission or not. Accordingly, given its broadest reasonable interpretation, the teachings of Owashi as modified by Kim meets the claimed limitations.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Seung H. Lee whose telephone number is (571) 272-

Art Unit: 2876


2401. The examiner can normally be reached on Monday to Friday from 7:30 AM to 4:00 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571) 272-2398. The fax-phone number for this group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [seung.lee@uspto.gov].

*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

  
Seung H. Lee  
Art Unit 2876  
April 2, 2004

  
MICHAEL G. LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800